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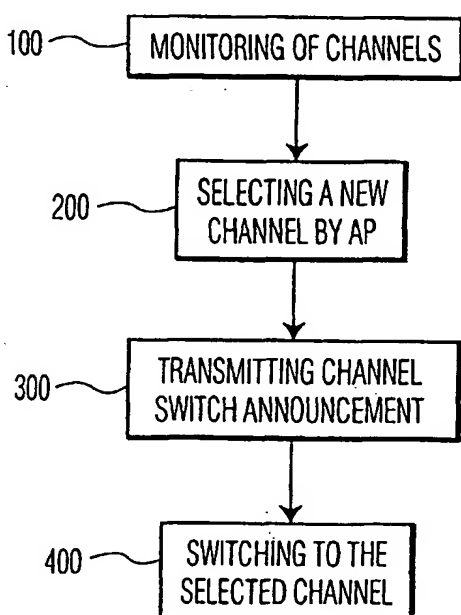
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(54) Title: **DYNAMIC FREQUENCY SELECTION SCHEME FOR IEEE 802.11 WLANs**



(57) Abstract: Disclosed is a method and system for dynamically selecting a communication channel between an access point (AP) and a plurality of stations (STAs) in an IEEE 802.11 wireless local area network (WLAN). The method includes the steps of: determining whether a new channel to be used by the plurality of STAs is needed; measuring the channel quality of a plurality of frequency channels by at least one of the plurality of STAs; reporting the quality of the plurality of frequency channels in terms of a received signal strength indication (RSSI), Clear Channel Assessment (CCA) busy periods and periodicity; and, selecting one of the candidate channels based on the channel quality report for use in communication between the AP and the plurality of STAs.

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## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7      H04L12/28

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7      H04L      H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>CHOI S ET AL: "Transmitter Power Control (TPC) and Dynamic Frequency Selection (DFS) Joint Proposal for 802.11h WLAN" IEEE 802.11-01/169, XX, XX, 12 March 2001 (2001-03-12), pages 1-16, XP002213584 abstract page 8, paragraph 3 -page 10, paragraph 3.9.1 page 12, paragraph 3.9.4.3 -page 15, paragraph 4 figures 5,6,10; table 12</p> <p style="text-align: center;">-/--</p>	1-24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CERVELLO G ET AL: "Dynamic Channel SDelection (DCS) Scheme for 802.11" IEEE 802.11-00/195, XX, XX, 12 July 2000 (2000-07-12), pages 1-7, XP002213585	1-21
Y	abstract page 2, paragraph 3 -page 6, paragraph 4	22-24
Y	US 6 023 622 A (PLASCHKE JOHN ET AL) 8 February 2000 (2000-02-08) column 1, line 14 - line 18 column 6, line 17 -column 8, line 3 column 8, line 50 - line 58; figure 9	22-24
A	"ETSI TS 101 761-2 V1.2.1 (2001-04), Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Data Link Control (DLC) Layer; Part 2: Radio Link Control (RLC) sublayer" ETSI TS 101 761-2 V1.2.1 (2001-04), 'Online! April 2001 (2001-04), pages 1,74-88, XP002219740 Retrieved from the Internet: <URL:http://WEBAPP.ETSI.ORG/exchangefolder/ts_10176102v010201p.pdf> 'retrieved on 2002-11-07! the whole document	1-24

### Information on patent family members

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